

Lesson 1-8

age-0108
Multiplying Decimals

Lesson Objective To multiply decimals and to solve problems by multiplying decimals	NAEP 2005 Strand: Number Properties and Operations Topic: Number Operations Local Standards: _____
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Examples

- ❶ **Multiplying by a Decimal** Find the product 2.73×4 .

$$\begin{array}{r}
 2.73 \leftarrow \boxed{} \text{ decimal places} \\
 \times 4 \leftarrow + \boxed{} \text{ decimal places} \\
 \hline
 \boxed{} \boxed{} \boxed{} \boxed{} \leftarrow \boxed{} \text{ decimal places}
 \end{array}$$

- ❷ **Multiplying Decimals** Find the product 0.6×0.42 .

$$\begin{array}{r}
 0.42 \leftarrow \boxed{} \text{ decimal places} \\
 \times 0.6 \leftarrow + \boxed{} \text{ decimal places} \\
 \hline
 \boxed{} \boxed{} \boxed{} \boxed{} \leftarrow \boxed{} \text{ decimal places}
 \end{array}$$

Quick Check

1. a. Find 6×0.13

- b. Find 4.37×5 .

- c. Find 7×0.8

- d. Find 0.22×3 .

2. Find each product.

- a. $0.3(0.2)$

- b. $1.9 \cdot 5.32$

- c. 0.9×0.14

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Example

- 3 Cameron can read 196 words in a minute. Robert reads 1.6 times as fast. How many words can Robert read in a minute?

Estimate $196 \times \boxed{} \approx 200 \times 1.5$, or $\boxed{}$.

$$\begin{array}{r}
 196 \leftarrow \boxed{} \text{ decimal places} \\
 \times 1.6 \leftarrow \boxed{} \text{ decimal place} \\
 \hline
 1176 \\
 +196 \\
 \hline
 \boxed{}\boxed{}\boxed{}\boxed{} \leftarrow \boxed{} \text{ decimal place}
 \end{array}$$

Robert can read about $\boxed{}$ words in a minute.

Check for Reasonableness $\boxed{}$ is reasonable since it is close to $\boxed{}$.

Quick Check

3. One pound of tomatoes costs \$1.29. To the nearest cent, how much do 2.75 pounds of tomatoes cost?

Multiply

Directions: Complete only problems 1, 2, 5, 7 and 8.

1)

$$\begin{array}{r} 4.16 \\ \times 1.3 \\ \hline \end{array}$$

2)

$$\begin{array}{r} 51.6 \\ \times 1.3 \\ \hline \end{array}$$

3)

$$\begin{array}{r} .326 \\ \times 1.3 \\ \hline \end{array}$$

4)

$$\begin{array}{r} 516 \\ \times 2.1 \\ \hline \end{array}$$

5)

$$\begin{array}{r} 416 \\ \times 1.2 \\ \hline \end{array}$$

6)

$$\begin{array}{r} 3.56 \\ \times 21 \\ \hline \end{array}$$

7)

$$\begin{array}{r} .348 \\ \times 12 \\ \hline \end{array}$$

8)

$$\begin{array}{r} .438 \\ \times .21 \\ \hline \end{array}$$

9)

$$\begin{array}{r} 5.68 \\ \times 1.2 \\ \hline \end{array}$$

Directions: Set up and solve problems 22, 24 and 25 from page 40 of your textbook.

22.

24.

25.